RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/579,648_
Source: _IFWP,_
Date Processed by STIC: _5/30/06_

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/579,648_   CRF Edit Date: _5/30/06_
                                      Edited by: _n_

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

_/_ Deleted: _/_ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

____ Other:

_____
_____
_____

IFWP

RAW SEQUENCE LISTING   DATE: 05/30/2006
PATENT APPLICATION: US/10/579,648   TIME: 15:45:56

Input Set : N:\AMC\PTO.AMC.txt
Output Set: N:\CRF4\05302006\J579648.raw

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    4 <110> APPLICANT: BASF AKTIENGESELLSCHAFT et al.
    6 <120> TITLE OF INVENTION: METHODS FOR THE PREPARATION OF A FINE
    7        CHEMICAL BY FERMENTATION
   10 <130> FILE REFERENCE: BGI-160PC2
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/579,648
C--> 12 <141> CURRENT FILING DATE: 2006-05-18
   12 <150> PRIOR APPLICATION NUMBER: PCT/IB2003/006435
   13 <151> PRIOR FILING DATE: 2003-12-18
   15 <160> NUMBER OF SEQ ID NOS: 15
   17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
   19 <210> SEQ ID NO: 1
   20 <211> LENGTH: 1660
   21 <212> TYPE: DNA
   22 <213> ORGANISM: Corynebacterium glutamicum
   24 <220> FEATURE:
   25 <221> NAME/KEY: CDS
   26 <222> LOCATION: (301)...(1563)
   28 <400> SEQUENCE: 1
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   30 cacctgaggt ccgctacacc ggcgctaccc tgggttacca agtcggagca gcactcttcg 120
   31 gcggtaccgc acccattatc gcagcatggc tgttcgaaat ctccggcgga caatggtggc 180
   32 caatcgccgt ctacgtcgct gcatgttgcc ttctctctgt gatcgcctcg ttcttcatcc 240
   33 aacgcgtcgc gcaccaagag aactaaaatc taagtaaaac ccctccgaaa ggaaccaccc 300
   34 atg gtg aaa cgt caa ctg ccc aac ccc gca gaa cta ctc gaa ctc atg  348
   35 Met Val Lys Arg Gln Leu Pro Asn Pro Ala Glu Leu Leu Glu Leu Met
   36 1               5                   10                  15
   38 aag ttc aaa aag cca gag ctc aac ggc aag aaa cga cgc cta gac tcc  396
   39 Lys Phe Lys Lys Pro Glu Leu Asn Gly Lys Lys Arg Arg Leu Asp Ser
   40             20                  25                  30
   42 gcg ctc acc atc tac gac ctg cgt aaa att gct aaa cga cgc acc cca  444
   43 Ala Leu Thr Ile Tyr Asp Leu Arg Lys Ile Ala Lys Arg Arg Thr Pro
   44         35                  40                  45
   46 gct gcc gcg ttc gac tac acc gac ggc gca gcc gag gcc gaa ctc tca  492
   47 Ala Ala Ala Phe Asp Tyr Thr Asp Gly Ala Ala Glu Ala Glu Leu Ser
   48     50                  55                  60
   50 atc aca cgc gca cgt gaa gca ttc gaa aac atc gaa ttc cac cca gac  540
   51 Ile Thr Arg Ala Arg Glu Ala Phe Glu Asn Ile Glu Phe His Pro Asp
   52 65                  70                  75                  80
   54 atc ctc aag cct gca gaa cac gta gac acc acc acc caa atc ctg ggc  588
   55 Ile Leu Lys Pro Ala Glu His Val Asp Thr Thr Thr Gln Ile Leu Gly
   56             85                  90                  95
   58 gga acc tcc tcc atg cca ttc ggc atc gca cca acc ggc ttc acc cgc  636
   59 Gly Thr Ser Ser Met Pro Phe Gly Ile Ala Pro Thr Gly Phe Thr Arg
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60              100                 105                 110
62 ctc atg cag acc gaa ggt gaa atc gca ggt gcc gga gct gca ggc gct   684
63 Leu Met Gln Thr Glu Gly Glu Ile Ala Gly Ala Gly Ala Ala Gly Ala
64              115                 120                 125
66 gca gga att cct ttc acc ctg tcc acc ctg ggc act acc tcc atc gaa   732
67 Ala Gly Ile Pro Phe Thr Leu Ser Thr Leu Gly Thr Thr Ser Ile Glu
68              130                 135                 140
70 gac gtc aag gcc acc aac ccc aac ggc cga aac tgg ttc cag ctc tac   780
71 Asp Val Lys Ala Thr Asn Pro Asn Gly Arg Asn Trp Phe Gln Leu Tyr
72 145                 150                 155                 160
74 gtc atg cgc gac cgc gaa atc tcc tac ggc ctc gtc gaa cgc gca gcc   828
75 Val Met Arg Asp Arg Glu Ile Ser Tyr Gly Leu Val Glu Arg Ala Ala
76              165                 170                 175
78 aaa gca gga ttc gac acc ctg atg ttc acc gtg gat acc ccc atc gcc   876
79 Lys Ala Gly Phe Asp Thr Leu Met Phe Thr Val Asp Thr Pro Ile Ala
80              180                 185                 190
82 ggc tac cgc atc cgc gat tcc cgc aac gga ttc tcc atc ccg cca cag   924
83 Gly Tyr Arg Ile Arg Asp Ser Arg Asn Gly Phe Ser Ile Pro Pro Gln
84              195                 200                 205
86 ctg acc cca tcc acc gtg ctc aat gca atc cca cgc cca tgg tgg tgg   972
87 Leu Thr Pro Ser Thr Val Leu Asn Ala Ile Pro Arg Pro Trp Trp Trp
88              210                 215                 220
90 atc gac ttc ctg acc acc cca acc ctt gag ttc gca tcc ctt tcc tcg   1020
91 Ile Asp Phe Leu Thr Thr Pro Thr Leu Glu Phe Ala Ser Leu Ser Ser
92 225                 230                 235                 240
94 acc ggc gga acc gtg ggc gac ctc ctc aac tcc gcg atg gat ccc acc   1068
95 Thr Gly Gly Thr Val Gly Asp Leu Leu Asn Ser Ala Met Asp Pro Thr
96              245                 250                 255
98 att tct tac gaa gac ctc aag gtc atc cgt gaa atg tgg cca ggc aag   1116
99 Ile Ser Tyr Glu Asp Leu Lys Val Ile Arg Glu Met Trp Pro Gly Lys
100             260                 265                 270
102 ctc gta gtc aag ggt gtc cag aac gtt gaa gac tcc gtc aaa ctc ctc   1164
103 Leu Val Val Lys Gly Val Gln Asn Val Glu Asp Ser Val Lys Leu Leu
104             275                 280                 285
106 gac caa ggc gtc gac ggc ctc atc ctc tcc aac cac ggt ggc cgt caa   1212
107 Asp Gln Gly Val Asp Gly Leu Ile Leu Ser Asn His Gly Gly Arg Gln
108         290                 295                 300
110 ctc gac cgc gca cca gtc cca ttc cac ctc ctg cca cag gta cgc aag   1260
111 Leu Asp Arg Ala Pro Val Pro Phe His Leu Leu Pro Gln Val Arg Lys
112 305                 310                 315                 320
114 gaa gtc gga tct gaa cca acc atc atg atc gac acc ggc atc atg aac   1308
115 Glu Val Gly Ser Glu Pro Thr Ile Met Ile Asp Thr Gly Ile Met Asn
116             325                 330                 335
118 ggc gcc gac atc gtc gca gcc gta gcc atg ggc gct gac ttc acc ctc   1356
119 Gly Ala Asp Ile Val Ala Ala Val Ala Met Gly Ala Asp Phe Thr Leu
120         340                 345                 350
122 atc ggt cgt gcc tac ctc tac gga ctc atg gcc gga ggc cgc gaa ggc   1404
123 Ile Gly Arg Ala Tyr Leu Tyr Gly Leu Met Ala Gly Gly Arg Glu Gly
124             355                 360                 365
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RAW SEQUENCE LISTING   DATE: 05/30/2006
PATENT APPLICATION: US/10/579,648   TIME: 15:45:57

Input Set : N:\AMC\PTO.AMC.txt
Output Set: N:\CRF4\05302006\J579648.raw

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126 gtc gac cgc acc atc gcc att ctc cgc agc gag atc acc cgc acc atg   1452
127 Val Asp Arg Thr Ile Ala Ile Leu Arg Ser Glu Ile Thr Arg Thr Met
128     370                 375                 380
130 gct ctc ctc ggt gtt tcc tcc ctc gaa gaa ctc gag cca cgc cac gtc   1500
131 Ala Leu Leu Gly Val Ser Ser Leu Glu Glu Leu Glu Pro Arg His Val
132 385                 390                 395                 400
134 acc cag ctg gcc aag atg gtt cca gtt tct gac gca act cgt tct gca   1548
135 Thr Gln Leu Ala Lys Met Val Pro Val Ser Asp Ala Thr Arg Ser Ala
136             405                 410                 415
138 gcg gcg gag att taa aagtttctct ccttagctat taaaaggtgc ccatccgttt   1603
139 Ala Ala Glu Ile  *
140             420
142 ggatgggcac cttctcgttt cttgcaatcg gcatattcag tcaaaaaatg ttgaaat     1660
144 <210> SEQ ID NO: 2
145 <211> LENGTH: 420
146 <212> TYPE: PRT
147 <213> ORGANISM: Corynebacterium glutamicum
149 <400> SEQUENCE: 2
150 Met Val Lys Arg Gln Leu Pro Asn Pro Ala Glu Leu Leu Glu Leu Met
151 1                 5                   10                  15
152 Lys Phe Lys Lys Pro Glu Leu Asn Gly Lys Lys Arg Arg Leu Asp Ser
153             20                  25                  30
154 Ala Leu Thr Ile Tyr Asp Leu Arg Lys Ile Ala Lys Arg Arg Thr Pro
155             35                  40                  45
156 Ala Ala Ala Phe Asp Tyr Thr Asp Gly Ala Ala Glu Ala Glu Leu Ser
157     50                  55                  60
158 Ile Thr Arg Ala Arg Glu Ala Phe Glu Asn Ile Glu Phe His Pro Asp
159 65                  70                  75                  80
160 Ile Leu Lys Pro Ala Glu His Val Asp Thr Thr Thr Gln Ile Leu Gly
161             85                  90                  95
162 Gly Thr Ser Ser Met Pro Phe Gly Ile Ala Pro Thr Gly Phe Thr Arg
163             100                 105                 110
164 Leu Met Gln Thr Glu Gly Glu Ile Ala Gly Ala Gly Ala Ala Gly Ala
165             115                 120                 125
166 Ala Gly Ile Pro Phe Thr Leu Ser Thr Leu Gly Thr Thr Ser Ile Glu
167     130                 135                 140
168 Asp Val Lys Ala Thr Asn Pro Asn Gly Arg Asn Trp Phe Gln Leu Tyr
169 145                 150                 155                 160
170 Val Met Arg Asp Arg Glu Ile Ser Tyr Gly Leu Val Glu Arg Ala Ala
171             165                 170                 175
172 Lys Ala Gly Phe Asp Thr Leu Met Phe Thr Val Asp Thr Pro Ile Ala
173             180                 185                 190
174 Gly Tyr Arg Ile Arg Asp Ser Arg Asn Gly Phe Ser Ile Pro Pro Gln
175             195                 200                 205
176 Leu Thr Pro Ser Thr Val Leu Asn Ala Ile Pro Arg Pro Trp Trp Trp
177     210                 215                 220
178 Ile Asp Phe Leu Thr Thr Pro Thr Leu Glu Phe Ala Ser Leu Ser Ser
179 225                 230                 235                 240
180 Thr Gly Gly Thr Val Gly Asp Leu Leu Asn Ser Ala Met Asp Pro Thr
```

```
181                   245                  250                  255
182 Ile Ser Tyr Glu Asp Leu Lys Val Ile Arg Glu Met Trp Pro Gly Lys
183                   260                  265                  270
184 Leu Val Val Lys Gly Val Gln Asn Val Glu Asp Ser Val Lys Leu Leu
185         275                  280                  285
186 Asp Gln Gly Val Asp Gly Leu Ile Leu Ser Asn His Gly Gly Arg Gln
187     290                  295                  300
188 Leu Asp Arg Ala Pro Val Pro Phe His Leu Leu Pro Gln Val Arg Lys
189 305                  310                  315                  320
190 Glu Val Gly Ser Glu Pro Thr Ile Met Ile Asp Thr Gly Ile Met Asn
191                   325                  330                  335
192 Gly Ala Asp Ile Val Ala Ala Val Ala Met Gly Ala Asp Phe Thr Leu
193         340                  345                  350
194 Ile Gly Arg Ala Tyr Leu Tyr Gly Leu Met Ala Gly Gly Arg Glu Gly
195         355                  360                  365
196 Val Asp Arg Thr Ile Ala Ile Leu Arg Ser Glu Ile Thr Arg Thr Met
197     370                  375                  380
198 Ala Leu Leu Gly Val Ser Ser Leu Glu Glu Leu Glu Pro Arg His Val
199 385                  390                  395                  400
200 Thr Gln Leu Ala Lys Met Val Pro Val Ser Asp Ala Thr Arg Ser Ala
201                   405                  410                  415
202 Ala Ala Glu Ile
203                   420
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207 <211> LENGTH: 35
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Oligonucleotide
214 <400> SEQUENCE: 3
215 gagagagaga cgcgtcccag tggctgagac gcatc                        35
217 <210> SEQ ID NO: 4
218 <211> LENGTH: 34
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Oligonucleotide
225 <400> SEQUENCE: 4
226 ctctctctgt cgacgaattc aatcttacgg cctg                         34
228 <210> SEQ ID NO: 5
229 <211> LENGTH: 4323
230 <212> TYPE: DNA
231 <213> ORGANISM: Corynebacterium glutamicum
233 <400> SEQUENCE: 5
234 tcgagaggcc tgacgtcggg cccggtacca cgcgtcatat gactagttcg gacctaggga 60
235 tatcgtcgac atcgatgctc ttctgcgtta attaacaatt gggatcctct agacccggga 120
236 tttaaatcgc tagcgggctg ctaaaggaag cggaacacgt agaaagccag tccgcagaaa 180
237 cggtgctgac cccggatgaa tgtcagctac tgggctatct ggacaaggga aaacgcaagc 240
238 gcaaagagaa agcaggtagc ttgcagtggg cttacatggc gatagctaga ctgggcggtt 300
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RAW SEQUENCE LISTING   DATE: 05/30/2006
PATENT APPLICATION: US/10/579,648   TIME: 15:45:57

Input Set : N:\AMC\PTO.AMC.txt
Output Set: N:\CRF4\05302006\J579648.raw

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241 agatctgatc aagagacagg atgaggatcg tttcgcatga ttgaacaaga tggattgcac 480
242 gcaggttctc cggccgcttg ggtggagagg ctattcggct atgactgggc acaacagaca 540
243 atcggctgct ctgatgccgc cgtgttccgg ctgtcagcgc aggggcgccc ggttcttttt 600
244 gtcaagaccg acctgtccgg tgccctgaat gaactgcagg acgaggcagc gcggctatcg 660
245 tggctggcca cgacgggcgt tccttgcgca gctgtgctcg acgttgtcac tgaagcggga 720
246 agggactggc tgctattggg cgaagtgccg gggcaggatc tcctgtcatc tcaccttgct 780
247 cctgccgaga aagtatccat catggctgat gcaatgcggc ggctgcatac gcttgatccg 840
248 gctacctgcc cattcgacca ccaagcgaaa catcgcatcg agcgagcacg tactcggatg 900
249 gaagccggtc ttgtcgatca ggatgatctg gacgaagagc atcaggggct cgcgccagcc 960
250 gaactgttcg ccaggctcaa ggcgcgcatg cccgacggcg aggatctcgt cgtgacccat 1020
251 ggcgatgcct gcttgccgaa tatcatggtg gaaaatggcc gcttttctgg attcatcgac 1080
252 tgtggccggc tgggtgtggc ggaccgctat caggacatag cgttggctac ccgtgatatt 1140
253 gctgaagagc ttggcggcga atgggctgac cgcttcctcg tgctttacgg tatcgccgct 1200
254 cccgattcgc agcgcatcgc cttctatcgc cttcttgacg agttcttctg agcgggactc 1260
255 tggggttcga aatgaccgac caagcgacgc ccaacctgcc atcacgagat ttcgattcca 1320
256 ccgccgcctt ctatgaaagg ttgggcttcg gaatcgtttt ccgggacgcc ggctggatga 1380
257 tcctccagcg cggggatctc atgctggagt tcttcgccca cgctagcggc gcgccggccg 1440
258 gcccggtgtg aaataccgca cagatgcgta aggagaaaat accgcatcag cgctcttcc 1500
259 gcttcctcgc tcactgactc gctgcgctcg gtcgttcggc tgcggcgagc ggtatcagct 1560
260 cactcaaagg cggtaatacg gttatccaca gaatcagggg ataacgcagg aaagaacatg 1620
261 tgagcaaaag gccagcaaaa ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc 1680
262 cataggctcc gcccccctga cgagcatcac aaaaatcgac gctcaagtca gaggtggcga 1740
263 aacccgacag gactataaag ataccaggcg tttccccctg gaagctccct cgtgcgctct 1800
264 cctgttccga ccctgccgct taccggatac ctgtccgcct ttctcccttc gggaagcgtg 1860
265 gcgctttctc atagctcacg ctgtaggtat ctcagttcgg tgtaggtcgt tcgctccaag 1920
266 ctgggctgtg tgcacgaacc ccccgttcag cccgaccgct gcgccttatc cggtaactat 1980
267 cgtcttgagt ccaacccggt aagacacgac ttatcgccac tggcagcagc cactggtaac 2040
268 aggattagca gagcgaggta tgtaggcggt gctacagagt tcttgaagtg gtggcctaac 2100
269 tacggctaca ctagaaggac agtatttggt atctgcgctc tgctgaagcc agttaccttc 2160
270 ggaaaaagag ttggtagctc ttgatccggc aaacaaacca ccgctggtag cggtggtttt 2220
271 tttgtttgca agcagcagat tacgcgcaga aaaaaggat ctcaagaaga tcctttgatc 2280
272 ttttctacgg ggtctgacgc tcagtggaac gaaaactcac gttaagggat tttggtcatg 2340
273 agattatcaa aaaggatctt cacctagatc cttttaaagg ccggccgcgg ccgccatcgg 2400
274 cattttcttt tgcgtttttta tttgttaact gttaattgtc cttgttcaag gatgctgtct 2460
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277 ttcgcttgag gtacagcgaa gtgtgagtaa gtaaaggtta catcgttagg atcaagatcc 2640
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286 cctgagctgt agttgccttc atcgatgaac tgctgtacat tttgatacgt ttttccgtca 3180
287 ccgtcaaaga ttgatttata atcctctaca ccgttgatgt tcaaagagct gtctgatgct 3240
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VERIFICATION SUMMARY   DATE: 05/30/2006
PATENT APPLICATION: **US/10/579,648**   TIME: 15:45:58

Input Set : **N:\AMC\PTO.AMC.txt**
Output Set: **N:\CRF4\05302006\J579648.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing
(for reference only)

RAW SEQUENCE LISTING   DATE: 05/26/2006
PATENT APPLICATION: US/10/579,648   TIME: 08:25:28

Input Set : **F:\SEQLIST.txt**
Output Set: **N:\CRF4\05262006\J579648.raw**

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   4 <110> APPLICANT: BASF AKTIENGESELLSCHAFT et al.
   6 <120> TITLE OF INVENTION: METHODS FOR THE PREPARATION OF A FINE
   7         CHEMICAL BY FERMENTATION
  10 <130> FILE REFERENCE: BGI-160PC2
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/579,648
C--> 12 <141> CURRENT FILING DATE: 2006-05-18
  12 <150> PRIOR APPLICATION NUMBER: PCT/IB2003/006435
  13 <151> PRIOR FILING DATE: 2003-12-18
  15 <160> NUMBER OF SEQ ID NOS: 15
  17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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ERRORED SEQUENCES

P.4

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 819 <210> SEQ ID NO: 15
 820 <211> LENGTH: 7561
 821 <212> TYPE: DNA
 822 <213> ORGANISM: Corynebacterium glutamicum
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 844 taaaaaaga cctaaaatat gtaaggggtg acgccaaagt atacactttg ccctttacac 1200
 845 attttaggtc ttgcctgctt tatcagtaac aaacccgcgc gatttacttt tcgacctcat 1260
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857 cgatgtttcg cttggtggtc gaatgggcag gtagccggat caagcgtatg cagccgccgc 1980
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862 gacagccgga acacggcggc atcagagcag ccgattgtct gttgtgccca gtcatagccg 2280
863 aatagcctct ccacccaagc ggccggagaa cctgcgtgca atccatcttg ttcaatcatg 2340
864 cgaaacgatc ctcatcctgt ctcttgatca gatcttgatc ccctgcgcca tcagatcctt 2400
865 ggcggcaaga aagccatcca gtttactttg cagggcttcc caaccttacc agagggcgcc 2460
866 ccagctggca attccggttc gcttgctgtc cataaaaccg cccagtctag ctatcgccat 2520
867 gtaagcccac tgcaagctac ctgctttctc tttgcgcttg cgttttccct tgtccagata 2580
868 gcccagtagc tgacattcat ccggggtcag caccgtttct gcggactggc tttctacgtg 2640
869 ttccgcttcc tttagcagcc cttgcgccct gagtgcttgc ggcagcgtga agctagccat 2700
870 tgtccttctg gcagttgctt gcgccgccct cgttgccacc atctggatgc cactgttcgg 2760
871 atccttctcc gaccgcgtca accgtgcagt gctctacagg atctgtgcat ccgcaaccat 2820
872 cgtgctgatt gtcccttact acttggtcct caacaccggc gaaatttggg cactgtttat 2880
873 cactaccgtg attggcttcg gcatcctctg gggtagcgtc aacgcaatcc tcggaaccgt 2940
874 catcgcagaa aacttcgcac ctgaggtccg ctacaccggc gctaccctgg gttaccaagt 3000
875 cggagcagca ctcttcggcg gtaccgcacc cattatcgca gcatggctgt tcgaaatctc 3060
876 cggcggacaa tggtggccaa tcgccgtcta cgtcgctgca tgttgccttc tctctgtgat 3120
877 cgcctcgttc ttcatccaac gcgtcgcgca ccaagagaac taaaatctaa gtaaaacccc 3180
878 tccgaaagga accacccatg gtgaaacgtc aactgcccaa ccccgcagaa ctactcgaac 3240
879 tcatgaagtt caaaaagcca gagctcaacg gcaagaaacg acgcctagac tccgcgctca 3300
880 ccatctacga cctgcgtaaa attgctaaac gacgcacccc agctgccgcg ttcgactaca 3360
881 ccgacggcgc agccgaggcc gaactctcaa tcacacgcgc acgtgaagca ttcgaaaaca 3420
882 tcgaattcca cccagacatc ctcaagcctg cagaacacgt agacaccacc acccaaatcc 3480
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887 cagccaaagc aggattcgac accctgatgt tcaccgtgga tacccccatc gccggctacc 3780
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890 tcgcatccct ttcctcgacc ggcggaaccg tgggcgacct cctcaactcc gcgatggatc 3960
891 ccaccatttc ttacgaagac ctcaaggtca tccgtgaaat gtggccaggc aagctcgtag 4020
892 tcaagggtgt ccagaacgtt gaagactccg tcaaactcct cgaccaaggc gtcgacggcc 4080
893 tcatcctctc caaccacggt ggccgtcaac tcgaccgcgc accagtccca ttccacctcc 4140
894 tgccacaggt acgcaaggaa gtcggatctg aaccaaccat catgatcgac accggcatca 4200
895 tgaacggcgc cgacatcgtc gcagccgtag ccatgggcgc tgacttcacc ctcatcggtc 4260
896 gtgcctacct ctacggactc atggccggag gccgcgaagg cgtcgaccgc accatcgcca 4320
897 ttctccgcag cgagatcacc cgcaccatgg ctctcctcgg tgtttcctcc ctcgaagaac 4380
```

RAW SEQUENCE LISTING   DATE: 05/26/2006
PATENT APPLICATION: US/10/579,648   TIME: 08:25:29

Input Set : **F:\SEQLIST.txt**
Output Set: **N:\CRF4\05262006\J579648.raw**

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898 tcgagccacg ccacgtcacc cagctggcca agatggttcc agtttctgac gcaactcgtt 4440
899 ctgcagcggc ggagatttaa aagtttctct ccttagctat taaaaggtgc ccatccgttt 4500
900 ggatgggcac cttctcgttt cttgcaatcg gcatattcag tcaaaaaatg ttgaaatcag 4560
901 cactttcaat ttgggacatc tactcttagg agaaaagcca caaacctttc ccaccccaca 4620
902 accgtgtgtt ctgcagtcga cccagtttag aggaaacatg agtgacttca cggaaaatac 4680
903 ttggactgtc cactacgacg aagatggtga tttcccaaaa ttcttcaact ctctaaagga 4740
904 acacgagcgt ctagagtcga cctgcaggca tgcaagcttg gcgtaatcat ggtcatagct 4800
905 gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat 4860
906 aaagtgtaaa gcctggggtg cctaatgagt gagctaactc acattaattg cgttgcgctc 4920
907 actgcccgct ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggccaacg 4980
908 cgcggggaga ggcggtttgc gtattgggcg ctcttccgct cctcgctca ctgactcgct 5040
909 gcgctcggtc gttcggctgc ggcgagcggt atcagctcac tcaaaggcgg taatacggtt 5100
910 atccacagaa tcaggggata acgcaggaaa gaacatgtga gcaaaaggcc agcaaaaggc 5160
911 caggaaccgt aaaaaggccg cgttgctggc gtttttccat aggctccgcc cccctgacga 5220
912 gcatcacaaa aatcgacgct caagtcagag gtggcgaaac ccgacaggac tataaagata 5280
913 ccaggcgttt cccccctggaa gctccctcgt gcgctctcct gttccgaccc tgccgcttac 5340
914 cggataccctg tccgcctttc tcccttcgggg aagcgtggcg ctttctcata gctcacgctg 5400
915 taggtatctc agttcggtgt aggtcgttcg ctccaagctg ggctgtgtgc acgaacccccc 5460
916 cgttcagccc gaccgctgcg ccttatccgg taactatcgt cttgagtcca acccggtaag 5520
917 acacgactta tcgccactgg cagcagccac tggtaacagg attagcagag cgaggtatgt 5580
918 aggcggtgct acagagttct tgaagtggtg gcctaactac ggctacacta gaagaacagt 5640
919 atttggtatc tgcgctctgc tgaagccagt taccttcgga aaaagagttg gtagctcttg 5700
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921 gcgcagaaaa aaaggatctc aagaagatcc tttgatcttt tctacggggt ctgacgctca 5820
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925 cagtaagttg gcagcatcac ccgacgcact ttgcgccgaa taaatacctg tgacggaaga 6060
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928 aataagatca ctaccgggcg tattttttga gttatcgaga ttttcaggag ctgatagaaa 6240
929 cagaagccac tggagcacct caaaaacacc atcatacact aaatcagtaa gttggcagca 6300
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931 ataaatcctg gtgtccctgt tgataccggg aagccctggg ccaacttttg gcgaaaatga 6420
932 gacgttgatc ggcacgtaag aggttccaac tttcaccata atgaaataag atcactaccg 6480
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937 cttttccttgg tgtatccaac ggcgtcagcc gggcaggata ggtgaagtag gcccacccgc 6780
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941 acgaagagcg attgaggaaa aggcggcggc ggccggcatg agcctgtcgg cctacctgct 7020
942 ggccgtcggc cagggctaca aaatcacggg cgtcgtggac tatgagcacg tccgcgaggg 7080
943 cgtcccggaa aacgattccg aagcccaacc tttcatagaa ggcggcggtg gaatcgaaat 7140
944 ctcgtgatgg caggttgggc gtcgcttggt cggtcatttc gctcggtacc catcggcatt 7200
945 ttcttttgcg tttttatttg ttaactgtta attgtccttg ttcaaggatg ctgtctttga 7260
946 caacagatgt tttcttgcct ttgatgttca gcargaagct cggcgcaaac gttgattgtt 7320
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RAW SEQUENCE LISTING   DATE: 05/26/2006
PATENT APPLICATION: US/10/579,648   TIME: 08:25:29

        Input Set : F:\SEQLIST.txt
        Output Set: N:\CRF4\05262006\J579648.raw

    947 tgtctgcgta gaatcctctg tttgtcatat agcttgtaat cacgacattg tttccttytc 7380
    948 gcttgaggta cagcgaagtg tgagtaagta araggttaca tcgttaggat caagatccat 7440
    949 tcttaacaca aggccagttt tgttcagcgg cttgtatggg ccagttaaag aattataaac 7500
    950 ataaccaagc atgtaaatat cgttagacgt aatgccgtca atcgtcatta ttgatccgcg 7560
    951 g   7561
E--> 953 bgI-160Pc2
E--> 956 - 1 -   delete

VERIFICATION SUMMARY   DATE: 05/26/2006
PATENT APPLICATION: **US/10/579,648**   TIME: 08:25:30

Input Set : **F:\SEQLIST.txt**
Output Set: **N:\CRF4\05262006\J579648.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:953 M:254 E: No. of Bases conflict, LENGTH:Input:2 Counted:7567 SEQ:15
L:953 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:953 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SeqNo=15
L:955 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7561 Found:7567 SEQ:15